



Supplementary information, Fig. S5 Deletion of enhancer *Ect2* causes neural differentiation abnormality in embryonic stem cells.

Fig. S5 Deletion of Ect2 enhancer causes neural differentiation abnormality in

embryonic stem cells. a Representative genome browser snapshot of H3K27ac around the locus of Ect2 enhancer and gene expression of *2510009E07Rik* in all the gastrula samples. **b** Multi-dimensional scaling of D0 and D8 wild-type and Ect2-knockout cells based on transcriptome data. **c** Bar plot showing the expression levels of pluripotency factors and immunocytochemistry analysis of Oct4 protein level in the indicated cells. **d** Bar plot showing the representative gene expression change corresponding to Fig. 7g. **e** Bar plot showing the expression change of *Masp1*, *Map3k13* and *2510009E07Rik* genes. **f** Bar plot showing the expression dynamics of *2510009E07Rik* during mouse early embryogenesis. **g** Expression patterns of *2510009E07Rik* in various mouse tissues. The ENCODE transcriptome data were used in the analysis. **h** The line graph showing gene expression dynamics of *2510009E07Rik* during mouse neural differentiation detected by RT-qPCR. **i** Bar plot showing the expression patterns of representative genes after re-expression of *2510009E07Rik* gene in Ect2-knockout cells after 8 days of differentiation. Quantitative gene expression level was normalized to the expression level of *Gapdh*. Results are shown as means \pm SEM. Student's *t*-test, **P* < 0.05, ***P* <

0.01, *** $P < 0.001$. All experiments were performed at least twice.